

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method of telemicroscopy comprising the steps of: preparing a specimen on a microscopy slide, the complete specimen occupying an area of the microscopy slide; placing the slide upon the stage of a microscope equipped with a high power objective lens, digital imaging apparatus and motorized stage; imaging the specimen said area of the microscopy slide to obtain data for a composite high resolution image of the whole complete specimen; digitally processing the high resolution image data to obtaining data for a relatively low resolution copy of that the composite image of the complete specimen; and storing the high resolution image data and the low resolution copy of the image data in a datastore; wherein the method further comprises the steps of allowing access to the datastore from a terminal; transferring the low resolution copy of the image data from the datastore to the a terminal for displaying the a corresponding low resolution image, as a navigation map, upon a monitor of the terminal; and, in response to a selection by a user of the terminal, of an area of the navigation map, selecting by means of the remote terminal, as desired, an area of the low resolution image and transferring corresponding high resolution image data for that the selected area of the image from the datastore to the terminal.

2. (Original) The method according to claim 1, wherein the terminal is a remote terminal.

3. (Currently Amended) The method according to claim 1, further comprising the step of recording the areas of the low resolution image that are selected, for review of performance of a person said user performing the method.

4. (Currently Amended) The method according to claim 1, wherein the step of imaging comprises obtaining a continuous sequence of successive images of the specimen is obtained by advancing the field of view of the high power objective lens of the microscope stepwise across the specimen and acquiring an image of each field of view.

5. (Currently Amended) A telemicroscopy apparatus comprising a microscope provided with a high power objective lens, a digital imaging apparatus and a motorized stage,

wherein the apparatus which can be controlled to obtain, using the high power objective lens,
a digital image data or plurality of such images, at a desired high resolution, of an entire
specimen occupying an area of a microscopy slide placed upon the stage; image processing
means to process the high resolution digital image data to obtain a low resolution copy of the
image data obtained of the specimen; storage means to store the high resolution image data
and the low resolution copy of the image data thereby images obtained; and means for
transferring image data to a terminal in response to requests therefrom.

6. (Previously Presented) The apparatus according to claim 5, wherein the digital imaging apparatus is a digital camera.

7. (Currently Amended) The apparatus according to claim 5, comprising means for moving the objective lens of the microscope in order to provide automatic focussing focusing.

8. (Previously Presented) The apparatus according to claim 5, comprising means for recording what image data is requested for review of the performance of a user.

9. (Previously Presented) The apparatus according to claim 8, wherein the recording means is a data storage disk, such as a floppy disk.

Please add the following new claims:

10. (New) A method for acquiring image data for use in telemicroscopy, the method comprising the steps of:

placing a microscopy slide containing a prepared specimen upon a stage of a microscope equipped with a high power objective lens, digital imaging apparatus and motorized stage;

imaging the specimen using the high power objective lens to obtain high resolution digital image data of the whole specimen; and

digitally processing the high resolution digital image data to obtain a relatively low resolution copy of the image data.

11. (New) The method according to claim 10, further comprising:

storing the high resolution image data and the low resolution copy of the image data in a datastore.

12. (New) The method according to claim 10, wherein during the imaging, the method further comprises periodically refocusing the microscope by moving the objective lens relative to the microscopy slide.

13. (New) The method according to claim 10, wherein the step of imaging the specimen comprises obtaining a continuous sequence of successive images of the specimen by advancing the field of view of the high power objective lens of the microscope stepwise across the specimen and acquiring an image of each field of view.

14. (New) The method according to claim 13, further comprising processing the image data acquired for each image of each field of view, and storing the processed data in a datastore.

15. (New) The method according to claim 14, wherein the processing comprises one or more of: digital image compression, and processing to remove peripheral shading around each image of each field of view.

16. (New) A method of telemicroscopy comprising the steps of: acquiring image data for a specimen using the method according to claim 10; allowing access to the datastore from a terminal; transferring the data for the low resolution copy of the image data to the terminal and displaying a corresponding low resolution image upon a monitor; and in response to user selection, by means of the terminal, of an area of the low resolution image, transferring corresponding high resolution image data for that area from the datastore to the terminal.

17. (New) The method according to claim 16, wherein the user selection is achieved by selecting an area of the low resolution image displayed on a monitor of the terminal.

18. (New) The method according to claim 16, further comprising the step of recording the areas of the low resolution image that are selected, for review of performance of a person performing the method.

19. (New) A telemicroscopy apparatus comprising: a microscope provided with a high power objective lens, a digital imaging apparatus and a motorized stage, wherein the apparatus can be controlled to obtain, using the high power objective lens, digital image data, at a desired high resolution, of an entire specimen on a microscopy slide placed upon the stage; image processing means to process the high resolution digital image data to obtain a low resolution copy of the image data; storage means to store the high resolution image data and the low resolution copy of the image data thereby obtained; and means for transferring, in use, image data to a terminal in response to requests therefrom.

20. (New) The apparatus according to claim 19, wherein the digital imaging apparatus is a digital camera.

21. (New) The apparatus according to claim 19, comprising means for moving the high power objective lens of the microscope in order to provide automatic focusing.

22. (New) The apparatus according to claim 19, comprising means for recording what image data is requested for review of the performance of a user.

23. (New) The apparatus according to claim 22, wherein the recording means is a data storage disk, such as a floppy disk.

24. (New) A method for acquiring image data of a specimen for use in telemicroscopy, comprising the steps of: imaging the specimen using a high power digital microscope to obtain high resolution digital image data of the whole specimen; and digitally processing the high resolution digital image data to obtain a relatively low resolution copy of the image data.

25. (New) A telemicroscopy apparatus for imaging a specimen comprising: a high resolution digital microscope being controllable to obtain high power digital image data of the entire specimen; image processing means to process the high resolution digital image data to obtain a low resolution copy of the image data; storage means to store the high resolution image data and the low resolution copy of the image data thereby obtained; and means for transferring, in use, image data to a terminal in response to requests therefrom.